#### DOCUMENT RESUME

ED 037 016 EF 001 068

TITLE A Long-Range Developmental Program.

INSTITUTION Pennsylvania State Dept. of Public Instruction,

Harrisburg. Bureau of Building Construction.

PUB DATE 66
NOTE 19p.

EDRS PRICE EDRS Price MF-\$0.25 HC-\$1.05

DESCRIPTORS \*Educational Programs, \*Financial Problems, \*Master

Plans, \*Population Growth, \*School Planning

### ABSTRACT

This article outlines the minimum requirements for the preparation of a long-range development plan covering a period of ten years or longer. Cooperation with local municipal plan boards and other community agencies is encouraged. The main topics discussed are--(1) comprehensive studies of past and projected community growth trends in the school district, (2) procedures for determining the number, size, and type of new school buildings needed during the next decade, and (3) long-range developmental programs for financial support of the program. A list of sources for use in gathering material and data essential for preparation of a long-range developmental program is included. (JZ)



# Commonwealth of Pennsylvania Department of Public Instruction Bureau of Building Construction Harrisburg

A LONG-RANGE DEVELOPMENTAL PROGRAM

## Introduction

"Planning" is a commonplace term familiar to all school board members and school administrators; without it there would be little sense of purpose, direction or achievement. But, Long Range Planning has become a necessity with the growing importance and responsibilities of the public school in today's society.

In most communities the public school system is the largest single enterprise. It employs more people than any other employer. It has the largest operating budget. Its assets - land, buildings and equipment - are most often of greater value than those of any other public or private enterprise. However, the financial resources of schools are usually limited. Only through sound long-range planning can a Board be certain that monies will be used wisely, in meeting the needs of larger, more complex and varied educational requirements.

Why the increased emphasis on long-range planning? During the depression years of the 1930's, tax money was not available for new school buildings. In the war years of the 1940's, scarcity of critical materials prevented school construction. However, the 1950's showed particular promise, since for the first time, the Commonwealth became a participant in the approved capital expenditures for new school buildings.

Increased population, obsolescence of existing structures, démanding educational alterations and expansions, etc. - all precipitated a mad scramble for State approval of new school building projects. This has

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.



in establishing a maximum dollar limitation, beyond which projects could not be approved with state subsidy. These limits were advanced each session of the General Assembly until 1961, when the "ceiling" was removed entirely. From 1950 to 1965, approximately two (2) billion dollars have been spent on new public school structures.

Much of the construction was undertaken in great haste - as applications were processed in chronological order, many were filed without any appreciable planning - simply to get "in line" ahead of neighboring schools. Many of the administrative units were too small to warrant educationally sound building programs; this situation was abetted by the philosophy of the 1950 County Plans. These plans suggest that the minimum size of an administrative unit should be sixteen hundred (1600) pupils, but by most the word minimum was misinterpreted to mean maximum. Most competent educators knew then, that the minimum number of pupils, per unit, should be four, five or more thousand.

Act 299 of 1963 has resulted in larger school districts. A plateau of public school construction has been reached. The time is <u>now</u> to approach public school construction with a scientific appraisal of the educational requirements of the entire administrative unit.

Conscientious preparation of the Long-Range Developmental Plan will avert many of the errors and pitfalls of the past decade.

# A LONG RANGE DEVELOPMENTAL PROGRAM

# Principles and Criteria

Planning is not new to school administrators and boards of school directors. Curriculum development, purchasing of supplies, recruitment and utilization of personnel, and construction of budgets -- all involve elements of planning. Unfortunately, one area where planning has too frequently been neglected, until the need is urgent, is in long range planning for school facilities. This has often resulted in ill advised locations of school buildings, hurried decisions dictated by immediate pressing needs, and the hasty construction of facilities that bear little relationship to the educational philosophy of the community, or the demands of an expanding curriculum. Lack of planning gives room for costly educational errors and is responsible for waste in purchase and selection of school sites. In most communities, if acquisition of school sites is delayed until expanded enrollments dictate the need, energetic developers have already acquired the more desirable locations or expanding values have imposed added financial burdens that might well have been avoided if advance planning had been done years earlier.

The purpose of this prospectus is to set forth the minimum requirements of the State Board of Education with respect to the content of a long range Developmental Plan for public schools, and suggestions for studies and sources of material for its preparation; this has been referred to as The Master Plan for School Buildings.

A Long Range Developmental Plan is a study to determine the school facilities that will be needed in the administrative unit for the next ten (10) years, or longer.



all of the physical facilities required to adequately service that growth, is the responsibility of local, county and regional planning commissions. Where such bodies exist, the closest cooperation and interchange of ideas should be maintained between the staffs of these agencies and school officials preparing Long Range Developmental Plans.

If it can be arranged, a professional staff member of the local, county or regional planning group should be assigned to work with school officials on their planning work, if only on a part-time basis. This will assure close cooperation between the two groups and keep the planners preparing a Comprehensive Plan for the area continually informed of the progress of the Long Range Developmental Plan. This is particularly important in the consideration of school sites since the Department of Public Instruction seeks recommendation and review of proposed sites by local, regional or county planning agencies, where these exist, before approval of such sites is given by the Department. Keeping these agencies currently informed of the progress the school officials are making, will greatly expedite a favorable reaction of the overall planning group to the sites selected for future school buildings.

County and regional planning commissions, being usually staffed by professional planners, will have done or can do many of the studies and projections required for the preparation of a long range school building plan. Although the advice and counsel of professional planners should be continually sought during the preparation of the Plan, it is strongly recommended that school officials, themselves, prepare the Developmental Plan. School staffs are usually in a better position to know the type of



facilities best suited to implement the educational program than professional planners, who must be conversant with the broader aspects of community planning. The activities necessary, in preparing a Developmental Plan will familiarize school personnel with many phases and details of their community and yield other concomitant values that will be lost to them if the task is delegated to professional planners.

It should not be assumed that a Long Range Developmental Plan is finished after it is once prepared. Because of human inability to foresee the future with complete accuracy, no plan--no matter how carefully prepared--will be perfect. With the passage of time, errors in basic assumptions, inaccuracies in forecasts of population growth and various other factors and unforeseen events materially affecting the plan will become manifest. It is mandatory, therefore, that the plan be reappraised periodically--at least every two years--and adjusted to the course of events as they unfold, in order to maintain the plan as a valid guide to future action.

Following is an outline, setting forth the minimum requirements for the preparation of the Long Range Developmental Plan. The items included should be collected and related to show the reasons for the final recommendations incorporated in the Plan.

### I. A General Introduction

Show the characteristics of the administrative unit and the nature and objectives of its educational program. Large scale aerial photographs of the region will prove helpful in providing

an overall view of the unit as a basis for planning. The following should be included:

- A. A very brief description of the general character and physical setting of the administrative unit, containing:
  - 1. Regional relationships, geographic features, topography, and other physical facts.
  - 2. Historical and cultural backgrounds; number of residents, local traditions and aspirations, community structure, recreational and other social opportunities.
  - 3. A general appraisal of the economy; number and kinds of industries and businesses, number of employees, kinds of occupations, income levels, past and probable future trends in economic conditions.
  - 4. List of present and proposed public facilities, including recreational areas, fire and police stations, public and semi-public buildings, water, sewer and other public facilities included in the Comprehensive Plan for the area as projected by local, county or regional planning groups.
  - 5. A project mobility rate and the range of mobility of secondary school graduates or drop-out. The mobility of the population of a community is related to local traditions and aspirations.

- B. A brief description of the existing school system or systems composing the administrative unit, as:
  - 1. A map of the entire unit.
    - (a) Establish the locations of existing schools (public and private) by size and type, and the attending areas served by each.
    - (b) Spot on the map the approximate location of residences of all pupils. Indicate by appropriate colors or otherwise identify--preschool, kindergarten, elementary, secondary, area vocational-technical. (A so-called spot map.)
  - 2. Number and grade levels of ALL students now in the area and enrolled in the schools--public and private.
  - 3. Age and general condition of existing public school buildings, with descriptions and pertinent date of each.
  - C. Description of the present educational program or programs; and the proposed educational program for the administrative unit--with long-range policy objectives, as:
    - School organization (including preschool through Community College).
    - Curriculum offerings.

- 3. Minimum and maximum size of schools and classes.
- 4. Maximum walking distance and transportation time for all students.
- 5. Provisions for handicapped and gifted children.

- 6. Provisions for health, guidance, psychological and social services.
- 7. Co-curricular activities.
- 8. Community activities.
- II. Comprehensive Studies of Past and Projected Community Growth
  Trends in the Administrative Unit.

It is imperative that school officials coordinate their plans and cooperate with the local, county and regional planning commissions. Where and when new school facilities will be needed is in direct relation to future patterns of residential, commercial, industrial and other land uses (and the consequent distribution of population); this is also true of the locations of existing and proposed streets and highways, water and sewer mains, recreation facilities, etc. Conversely, the locations of existing and proposed new schools greatly influence the desirable pattern of land uses and the proper locations of other physical facilities.

Local, county and regional planning agencies are responsible for making recommendations to their respective governmental bodies concerning measures for implementing their Comprehensive Plan. Among such measures are municipal and county zoning and subdivision regulations for guiding development into the pattern recommended by the Comprehensive Plan. The enactment and administration of zoning subdivision regulations establishes not only the pattern of population distribution but also approximate ceilings on the number of families which may ultimately be

located in each zoning district or each approved subdivision.

The effect of these municipal and county activities on potential school loads is obvious.

It is very much in the interest of school authorities to promote and support effective implementation of the Comprehensive Plan. If, in the absence of effective execution, developments should occur in a manner substantially different from those proposed in the Comprehensive Plan, the results could be injurious to the long range developmental school program. The sizes and locations of the schools proposed, in the developmental plan, might well be illogical in terms of community growth that actually develops. Effective zoning, subdivision regulations, capital improvements programming and other performance measures are essential to the preparation of the Comprehensive Plan.

Achievement of a well-constructed pattern in the Comprehensive Plan, in turn, will assure that school facilities constituted in accordance with that pattern, will efficiently and economically meet the school needs of the community.

It is therefore evident that much of the material outlined below will have to come from the work of existing planning groups. If such planning groups are not operating in the area, the data will have to be compiled by the school staff.

A. An analysis of population trends over the past 30 years or more (by decades) and a forecast of future population

trends for the next ten years, at least, and preferably the next twenty years. Include the following:

- 1. Overall trends in population growth as related to State and regional growth and the potential for housing development in the administrative unit's area.
- Population characteristics, such as birth rates and age composition. (Including the number of preschool and school age children).
- 3. Maps showing growth/shifts in the distribution of population within the area of the administrative unit.
- 4. School enrollments (public and private) for at least the past ten (10) years and for ten (10) years in the future. This should show the grade to grade survival ratio and, if applicable, the migration of non-public school pupils into and out of the public schools.
- B. A study of highways and major streets, and of other transportation facilities, in the administrative unit. Maps and textual materials should be prepared indicating:
  - 1. The locations of present and proposed highways and major streets by type.
  - 2. Present and projected future traffic volumes on existing and proposed highways and major streets.

- 3. The locations and general character of railroads, airports and other transportation facilities, if any.
- C. A survey of existing and proposed utilities and public services. Maps should show the locations of:
  - Central water and sanitary and storm sewer facilities -existing and proposed.
  - 2. Electric and gas service lines.
  - 3. Fuel, power and service transmission lines--underground and overhead.
- III. Determine the number, size and type of new school facilities that will be needed during the next ten (10) years; where these should be located, to serve most conveniently and safely the persons who will be using them, and approximately when they will be needed.
  - A. This determination will depend partly on a critical appraisal of:
    - 1. The general condition of buildings and the adequacy or obsolescence of buildings and sites with respect to year of construction, safety, sanitation, location, size, and other standards.
    - 2. The adequacy of existing buildings and sites in terms of their capacity to accommodate projected enrollments and their adaptability to instructional objectives.



- 3. The feasibility of expanding existing facilities and of bringing obsolete structures up to adequate minimum standards.
- 4. The accessibility of each school plant, in relation to convenience and safety, from all parts of the attendance area.
- B. Future school building needs should be determined on the basis of the above evaluation of present schools, the projections of community growth patterns and distribution of population, and the projection of public school enrollments. Maps, charts, and textual materials should indicate:
  - 1. Existing schools to be retained or expanded, their optimum capacities and attendance areas.
  - 2. Existing school plants or segments of plans to be abandoned, and approximate date when this will be accomplished.
  - 3. New schools to be established, their proposed capacities and attendance areas, and date of expected occupancy.
  - 4. The anticipated annual enrollment, at each school, for the next ten (10) years.
  - C. Decisions regarding the locations of new schools should be made with due consideration of the Department of Public Instruction's, "Principles and Criteria for Selection and



Development of School Sites", as currently effective, including all revisions.

- meet future needs should include approximate size, locations and suitability as to topography, environment, earth composition, etc.
- D. A schedule arranged in priority of urgency, should be prepared showing each new facility and proposed expansion, remodeling or change in use of existing school plant and the approximate time each project should be undertaken.
- IV. A Long Range Developmental Program will be no better than the plan, by which it is to be financed.
  - A. This requires realistic appraisals of the administrative unit's financial resources and obligations, including:
    - 1. The annual market and assessed valuations of real property in the area--during each of the past ten (10) years.
    - 2. Past tax rates for school, county and municipal purposes; the percentage of taxes collected and the amount of delinquent taxes--by years.
    - 3. Total annual school receipts, by source, and total annual expenditures of the school system for the past ten (10) years.



- 4. Net bonded indebtness, and the floating indebtedness, by both electors and school boards--over the past ten (10) years.
- 5. Unused borrowing capacity of the district or districts, by years, for the past ten (10) years.
- 6. Pay-out schedules of all present bonded indebtedness and rentals on authority financed projects, which are under leases or where leases are pending.
- B. Meticulous estimates of the annual overall costs of the school construction program, and the cost of operating the future school system; these estimates should be prepared for:
  - The cost of each new school facility, or expansion or major renovation of existing facilities, proposed for the next ten (10) years.
  - 2. The proposed method or methods of financing the construction of new school facilities.
  - The overall annual cost of the school construction program, by year for the next ten (10) years, based on the priority schedule, which specifies when each new facility will be needed; include projected payout schedules of bonded indebtedness and authority rentals, integrated with existing pay-out schedules.

- 4. The total cost of operating and staffing the entire school system, by year for the next ten (10) years, including administrative, instructional, specialists, custodial and secretarial personnel.
- an attempt to project the probable income, applying an escalator or curve clause, of the administrative unit ten years into the future. This is probably the most difficult feature of a Long Range Developmental Program because, in addition to the variables outlined above, there are factors of economic conditions, property values, possible Federal subsidies, changes in State reimbursement, etc.

State funds comprise a large share of the payments for public education through various subsidy programs now in effect. How large a share this will be in the future is dependent, to a great extent, upon enactments of the General Assembly. State wide, the Commonwealth's share is, and has been for the past few years, between 40% and 50% of the total expenditure for education in Pennsylvania.

In projecting resources for financing education, in a given administrative unit, school officials will have to assume an arbitrary percentage for state aid, based on their own situation, either up or down from the 40-50% state wide average. This will be governed by projection of pupil population, probable market value on real property, per-

missive sources of other taxes and similar factors that influence reimbursement fractions. The percentage thus selected can then be used to determine the annual local effort that must be made to support education in the administrative unit, during the period under consideration.

Real estate taxes still continue to yield the bulk of the revenue to support schools. Projection of tax rates on real estate should reflect anticipated changes in property values, especially where proposed residential, commercial and industrial construction is likely to occur. In addition to projection of real estate taxes, consideration should be given to changes in per capita tax revenue, because of probable increases in population and to shifts of income from taxes to be levied under Act 481 (the so-called "tax anything Law").

Since real estate taxes are levied by mills per thousand of assessed value, and other taxes are levied as a percentage of a certain amount, while still others are levied as a flat charge per person, it is desirable to reduce these to some common denominator for comparative purposes. A suggested means for doing this, for this section and for section IV A-2 of the outline, is to use the method followed in the report of the Governor's Committee of One Hundred for Better Education, published in September 1962, where taxes of

all kinds were designated in mills per market value. Market value for each school district can be obtained from the County Superintendent of Schools office or directly from the annual certification of the Pennsylvania State Tax Equalization Board. One could also use a graph depicting a curve which relates all such income to the total local effort.

- Project annual tax rates to meet financial requirements
   on schedules during the period covered by the Long Range
   Developmental Program.
- 2. If possible, similar projections should be made for local and county taxes, so that comparisons can be made between total past and estimated future taxes in the area, since such taxes all come from the same persons.

In conclusion, it should be pointed out that the foregoing outline suggests minimum criteria and that other aspects of community development should be considered, if appropriate to the preparation of a Long Range Developmental Program. The outline is not a check list, under which it is necessary only to indicate interesting and factual information for each listed element. Rather it must be emphasized that the planning elements are to be analyzed in terms of their implications for the location and utilization of school buildings. The outline is valid for this purpose only to the extent that it includes the obvious and more characteristic factors that will effect judgments.



NOTE: In preparing the Long Range Developmental Program, and in any communication in reference to it, its full title - "Long Range Developmental Program" - should be used in order to avoid confusion with the local or county Comprehensive Plan for community development, or with any of the latter's various other components.

List of sources that may prove helpful in gathering material for the preparation of a Long Range Developmental Program.

- 1. Local, county and regional planning commissions.
- 2. State Planning Board, Governor's Office, Harrisburg, Pennsylvania.
- 3. Bureau of Community Development, Pennsylvania Department of Commerce, Harrisburg, Pennsylvania.
- 4. United States Bureau of Census Report for 1960 and preceding decades.
- 5. Bureau of Research, Department of Public Instruction.
- 6. Pennsylvania Department of Health, Division of Vital Statistics.
- 7. Municipal, Township and County Officials.
- 8. Local Historical societies.
- 9. Local and State Chambers of Commerce.
- 10. United States Geological Survey.
- 11. United States Department of Agriculture Aerial maps.
- 12. Pennsylvania Department of Highways Bureau of Advanced Planning.
- 13. Pennsylvania Department of Internal Affairs Bureau of Statistics.
- 14. Aerial photographers.
- 15. Telephone and power companies operating in the area. These organizations often make long range studies for planning purposes.

